WHAT IS CLAIMED IS:

1. An electric motor comprising:

a stator:

an armature having an armature shaft and being disposed within said stator, wherein said armature includes a plurality of magnet wires formed in a plurality of coils, and wherein ends of said magnet wires are secured to a commutator associated with said armature shaft;

a thermally conductive plastic coating molded over said armature and said ends of said magnet wires to at least substantially encase said magnet wires in said plastic; and

a fan molded at one end of said armature shaft from said thermally conductive plastic.

2. The electric motor of claim 1, wherein said fan is integrally formed from said thermally conductive plastic used to at least substantially encase said magnet wires.

3. The electric motor of claim 1, wherein said armature includes an armature stack having a plurality of circumferentially arranged slots within which said magnet wires are disposed; and

wherein said thermally conductive plastic fills said slots.

4. The electric motor of claim 1, wherein said thermally conductive plastic comprises a composite thermoplastic.

5. The electric motor of claim 3, wherein said thermally conductive plastic has a density approximately equal to said magnet wires, to thereby eliminate the need for balancing of the armature after the plastic is molded over the armature.

6. The electric motor of claim 3, wherein said thermally conductive plastic comprises a high temperature nylon mixed with particles of a non-ferromagnetic material.

7. The electric motor of claim 3, wherein said thermally conductive plastic comprises a thermoset plastic mixed with particles of a non-ferromagnetic material.

8. The electric motor of claim 6, wherein said non-ferromagnetic material comprises one of aluminum, ceramic and copper.

9. The electric motor of claim 7, wherein said non-ferromagnetic material comprises one of aluminum, ceramic and copper.

10. An armature for an electric motor, comprising:

a lamination stack;

an armature shaft extending coaxially through said lamination stack;

a plurality of magnet wires wound around said lamination stack;

a commutator disposed on said armature shaft to which ends of said magnet wires are electrically coupled; and

a thermally conductive plastic coating molded over said armature, a portion of said coating forming an integrally formed fan adjacent said armature.

11. The armature of claim 10, wherein said thermally conductive plastic comprises a composite thermoplastic.

12. The armature of claim 10, wherein said thermally conductive plastic coating comprises particles of a non-ferromagnetic material.

13. The armature of claim 10, wherein said thermally conductive plastic coating comprises particles of one of the group of aluminum, ceramic and copper.

14. An electric motor for use with a power tool, said electric motor comprising:

a stator;

an armature disposed within said stator;

a thermally conductive plastic at least partially encasing a plurality of magnet wires of said armature; and

a molded fan formed from said thermally conductive plastic and disposed adjacent one end of said armature to provide a cooling airflow over said armature during use of said motor.

15. The electric motor of claim 14, wherein said thermally conductive plastic includes particles of one of the group of aluminum, copper and ceramic, to thereby provide said plastic with a density substantially equal to said magnet wires, to thereby eliminate the need to balance said armature.

16. A method for forming an electric motor, said method comprising the steps of:

providing a stator;

providing an armature having a plurality of magnet wires wound therearound;

molding a thermally conductive plastic over at least a portion of said armature to at least partially encase said magnet wires; and

molding a fan at one end of said armature from said thermally conductive plastic.

17. The method of claim 16, wherein the step of molding a thermally conductive plastic over said portion of said armature comprises the step of molding a composite thermoplastic over at least said portion of said armature.

18 The method of claim 16, wherein the step of molding a thermally conductive plastic over said portion of said armature comprises molding a mixture of said thermally conductive plastic and a secondary material over said portion of said armature, wherein said mixture has a density approximately equal to said magnet wires.

19. The method of claim 18, wherein said step of molding a mixture comprises molding a mixture of said thermally conductive plastic with a non-ferromagnetic material.

20. A method for forming an armature for an electric motor, said method comprising the steps of:

providing a lamination stack;

providing an armature shaft for supporting said lamination stack;

providing a commutator disposed on said armature;

winding a plurality of magnet wires around said lamination stack and securing ends of said magnet wires to said commutator;

performing a molding step to mold a thermally conductive coating over a substantial portion of said lamination stack to at least substantially encase said magnet wires therewithin, and to form a fan adjacent one end of said lamination stack from said thermally conductive coating.

21. The method of claim 20, wherein said molding step comprises using a composite thermoplastic to form said thermally conductive coating.

22. The method of claim 20, wherein said molding step includes using a high temperature nylon to coat a substantial portion of said armature.

23. The method of claim 20, wherein said molding step comprises molding a thermally conductive plastic mixed with particles of non-ferromagnetic material to provide said thermally conductive plastic with a density substantially equal to said magnet wires,

to thereby eliminate the need to balance said armature.

24. A method for forming an armature for an electric motor, said method comprising the steps of:

providing a lamination stack;

providing an armature shaft for supporting said lamination stack;

providing a commutator disposed on said armature;

winding a plurality of magnet wires around said lamination stack and securing ends of said magnet wires to said commutator;

performing a molding step to mold a thermally conductive plastic coating over a substantial portion of said lamination stack to at least substantially encase said magnet wires therewithin, and to form a fan adjacent one end of said lamination stack from said thermally conductive plastic coating, and wherein said thermally conductive plastic coating has a density approximately equal to said magnet wires, to thereby substantially eliminate the need to balance said armature prior to assembling said armature to form said electric motor.